

Appl. No.: 10/523,903
Reply to Office Action of: 07/26/2006

Amendments to the Drawings:

The attached sheet of drawings includes changes to Fig. 1

"Prior Art" has been added to the figure.

REMARKS

Fig. 1 has been amended as requested by the examiner.

Claims 1-7 have been cancelled without prejudice and replaced by new claims 8-15. This change has been made to clarify applicant's claimed invention and for simplicity of the amendment procedure.

The objective problem solved by the present invention is to propose a more efficient and a less expensive approach to reduce signal degradation in a connector system. The problem is solved thanks to the connector system of claims 8 and 15. With the present invention, the active electronic circuit is on the second connector part (e.g. a cable connector) and is powered via a power line provided on the first connector part (e.g. on a device board).

This approach is more efficient and less expensive since only when use of an active electronic circuit is required (for instance when the cable of the cable connector exceeds a certain limit), the electronic circuit is implemented in the second connector part. In the prior art approach, the electronic circuit was on the device board, and the electronic circuit was used whether or not the electronic circuit was necessary.

Independent Claims 8 and 15 are new and involve an inventive step over the cited references. Indeed, none of the prior art discloses a connector system including all the features of claim 8 or claim 15.

In order to assess the inventive step of the invention, we can regard that Fig. 1 of the application is the closest prior art. The difference between the present invention and the admitted prior art is that the active electronic circuit is on the second part and is powered by the first part. It is submitted that there is no incentive for the skilled person to choose to practice these differences insofar as the cited prior arts do not seek to solve the above-mentioned problem.

Naito seeks to provide a connector assembly which prevents crosstalk and is suitable for high speed transmission.

In Bassler, the addressed problem is clearly to propose a connector with improved signal integrity, wherein the impedance discontinuity is minimized in order to match the impedance of the transmission line.

In Boutros, the objective problem is to provide a connector assembly in which the plug connector is a modular connector adapted to receive equalizer board and that does not require any pre-soldering or pre-termination of the contacts to the equalization board. Boutros does not mention that the equalization circuitry is an active component.

Finally it is submitted that, although Larabell discloses in reference to Fig. 5, that termination power can be supplied from a host device to a bus device through the termination power lines of a cable and through termination power line of the regenerator bus, Larabell does not prompt the skilled person to adopt the solution of placing the electronic circuit on a second connector part and to power it from a power source of a first connector part. Indeed, the problem to be solved

by Larabell is to propose an improved bus repeater and/or converter that do not require additional external power connection, except power from a terminal power line.

The features of independent claims 8, 12, 13 and 15 are not disclosed or suggested in the cited art. Therefore, claims 8, 12, 13 and 15 are patentable and should be allowed.

Though dependent claims contain their own allowable subject matter, these claims should at least be allowable due to their dependence from allowable claim 8. However, to expedite prosecution at this time, no further comment will be made.

Regarding the objection raised against old claim 3, a lead can be found in the description which specifies that "Fig. 2 illustrates that the power supply line is isolated from the wires 13 of the cable 14 to avoid the wires 13 to carry a substantive voltage over the cable 14 to a third part 16."

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issue remain, the examiner is invited to call applicant's attorney at the telephone number indicated below.

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Respectfully submitted,

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10/23/2006
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